

Guest Editorial

William Freeman · Pietro Perona · Bernhard Schölkopf

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Computational Vision and Machine Learning have become synergistic fields of research. Modern machine learning techniques have improved the state of the art in computer vision and catalized re-thinking of key problems, such as recognition and tracking. In turn, vision has broadened the scope of machine learning, offering rich new challenges and highlighting the importance of representations.

This special issue contains 15 papers at the intersection of vision and learning, most firmly rooted in both areas. The topics span a range of computer vision topics, from object recognition and tracking to lower-level visual tasks such as feature detection and finding contours and segments. The machine learning methods include discriminative and generative models, as well as both parametric and non-parametric representations. Since databases are proving to be crucial for progress in both machine learning and computer vision, we

have also included two papers describing non-proprietary vision databases.

We sought to make the ideas and experiments presented in this special issue easily accessible to other researchers, so we required authors to:

- (a) Post their data (training and testing) on the web.
- (b) Make their code available in a form that allows other researchers to repeat easily the experiments, as well as run the code on different data and test modified versions of the algorithms.

This special issue was long in the gestation: we thank the referees for their careful work, and we apologize to the authors for the length of the process, which was our responsibility. We are excited by the outcome, however, and hope that readers value the articles of this special issue as much as we do.

W. Freeman (✉)
Dept of Electrical Engineering and Computer Science,
Massachusetts Institute of Technology,
Cambridge, MA 02139, USA
e-mail: billf@mit.edu

P. Perona
Dept of Electrical Engineering and Computation and Neural
Systems, California Institute of Technology,
Pasadena, CA 91125, USA

B. Schölkopf
Dept of Empirical Inference,
Max Planck Institute for Biological Cybernetics,
72076 Tübingen, Germany